

FEDOROV A. A.

89-3-8/30

AUTHORS: Sokolov, M. M. , Ochkur, A. P. , Fedorov, A. A. ,  
Karabanov, N. I.

TITLE: The Photo-Electric Absorption of Scattered  $\gamma$ -Rays (Foto-elektricheskoye pogloshcheniye rasseyannogo  $\gamma$ -izlucheniya)

PERIODICAL: Atomnaya Energiya, 1958, Vol. 4, Nr 3, pp. 284 - 285 (USSR)

ABSTRACT: The measurement of the  $\gamma$ -spectrum was carried out by means of a scintillation spectrometer to which a multichannel pulse analyzer was connected. As  $\gamma$ -radiator Tl-204, Hg-203, Cr-51, Cs-137 and Zn-65 were used, and the distance between the detector and the radiator was varied between 5 and 15 cm. For the case Cr-51, D = 10 cm, and with sand as scattering material, which once contained 0,5 %, then 2 %, 5 % of lead and 10 % of copper the measured scattering spectrum is graphically represented.

At about 100 KeV a minimum can be observed in the  $\gamma$ -spectrum which coincides with theoretical calculations. Within the range of about 150 KeV a more marked decrease is to be seen which corresponds to the single scattering of  $\gamma$ -quanta

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The Photo-Electric Absorption of Scattered  $\gamma$ -Rays

89-3-8/30

with minimum energy. In theoretical calculation this energy turns out to be 145 KeV.

The admixtures of lead considerably change the spectrum, not only decreasing the number of pulses but causing a depression which is to be seen within the range of 100 KeV, being dependent on the greatly increased photo-electric absorption coefficient for the  $\gamma$ -radiation, the energy of which approaches that of the K-binding energy of lead (88,2 KeV). Analogous pictures are given by all radiators investigated. There is 1 figure.

SUBMITTED: July 22, 1957

AVAILABLE: Library of Congress

1. Scattered  $\gamma$ -Rays-Photoelectric absorption
2.  $\gamma$ -Spectrum-Measurement
3. Scintillation spectrometers-Applications

Card 2/2

FOK, V.A.; FEDOROV, A.A.

Diffraction of a plane electromagnetic wave on an ideally con-  
ducting paraboloid of revolution. Zhur. tekhn. fiz. 28 no.11:  
2548-2566 N '58. (MIRA 12:1)  
(Electric waves)

5500

S/089/60/008/06/10/021  
B006/B063 82311

AUTHORS: Fedorov, A. A., Sokolov, M. M., Ochkur, A. P.

TITLE: Measurement of the  $\gamma$ -Emission Spectra of Radiative Neutron Capture in Certain Rocks

PERIODICAL: Atomnaya energiya, 1960, Vol. 8, No. 6, pp. 555-556

TEXT: The gamma lines emitted by various nuclei as a result of their absorption of thermal neutrons are characteristic of these nuclei. An examination of this gamma spectrum makes it possible to analyze complex chemical compositions. The authors used this method for the first time in 1956 when they detected certain chemical elements in rock specimens. ( $\text{Po} + \text{Be}$ ) with  $2.10^6 \text{n/sec}$  served as neutron source, and the gamma radiation was recorded by a scintillation spectrometer whose resolution was 12% for the gamma line of  $\text{Cs}^{137}$  (0.66 Mev). The experimental arrangement is briefly described. Fig. 1 shows a pulse-height spectrum corresponding to the gamma radiation that occurs in neutron bombardment

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Measurement of the  $\gamma$ -Emission Spectra of  
Radiative Neutron Capture in Certain Rocks

S/089/60/008/06/10/021  
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of hornstone (Curve 1) and diorite (Curve 2). The former is mainly composed of silicon and oxygen, the latter of oxygen, silicon, sodium, calcium, aluminum, and iron. The capture cross sections of the thermal neutrons and the main gamma lines ( $E_\gamma > 4.5$  Mev) of these elements are listed in a Table. As practically no neutrons are absorbed by oxygen, only the Si line (4.95 Mev) occurs in the 5-Mev region. Diorite exhibits additional maxima at 6.4 Mev (Na, Ca) and 7.6 Mev (Al, Fe). The elements may be distinguished by continuous recording of the intensity of  $\gamma$ -radiation. Fig. 2 shows core sampling diagrams which are briefly described. There are 2 figures, 1 table, and 3 references:  
1 Soviet and 1 Canadian.

SUBMITTED: December 12, 1958

4

Card 2/2

9,3700 (1163, 1127, 1036)  
9,9300

21428  
S/109/61/006/001/005/023  
E032/E114

AUTHORS: Vaynshteyn, L.A., and Fedorov, A.A.  
TITLE: Scattering of plane and cylindrical waves by an elliptical cylinder and the concept of diffraction rays  
PERIODICAL: Radiotekhnika i elektronika, Vol.6, No.1, 1961,  
pp. 31-46

TEXT: The present state of the theory of diffraction of electromagnetic waves by convex conducting bodies is largely based on the papers of V.A. Fok (Refs. 1-7). These papers introduced special functions (attenuation coefficients) which determine the diffraction field for different dispositions of the source and the point of observation. To start with, these functions refer to the "half-shadow" region. In the illuminated region they go over into the formulae of geometrical optics and have been extended to all points for the case of a sphere (Belkina and Vaynshteyn, Ref. 9, and Fedorov, Ref. 10) and a circular cylinder (Goryainov, Ref. 11). However, it is stated that the generalisation of the various formulae to a surface with a variable curvature is not obvious. This generalisation has been carried out by J.B. Keller (Ref. 12)

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S/109/61/006/001/005/023

E032/E114

Scattering of plane and cylindrical waves by an elliptical cylinder and the concept of diffraction rays

in the case of two-dimensional problems. Keller introduced the concept of diffraction rays which have curvilinear sections lying on the surface of the body and represent waves which have experienced diffraction in the normal sense of the term. On this basis the total field can be represented as a sum of contributions due to ordinary rays obeying the laws of geometrical optics and the above diffraction rays. The present authors emphasise that the concept of diffraction rays is still not completely justified from the theoretical point of view. It is simply a device for obtaining a physical interpretation and a short formulation of the asymptotic laws of diffraction for a certain class of problems. In the present paper the authors derive the asymptotic solution for the diffraction by a convex cylinder with variable surface curvature and the cylinder is then used to give a theoretical foundation for the concept of diffraction rays. The cylinder is taken in the form of an elliptical cylinder and the discussion is specialised to two-dimensional fields and simple boundary

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21428

S/109/61/006/001/005/023  
Scattering of plane and cylindrical..E032/E114

conditions. In particular, the diffraction of cylindrical and plane waves by a perfectly reflecting elliptical cylinder is discussed, assuming that the transverse dimensions and radii of curvature of the cylinder are large in comparison with the wavelength. The exact solution of the problem is obtained in the form of a series and a contour integral. When the asymptotic expressions for the radial and angular functions of the elliptical cylinder are substituted into the solution, one obtains the special functions introduced by V.A. Fok. The asymptotic solution obtained in this way corresponds to the concept of diffraction rays of J.B. Keller (Ref.12).

There are 2 figures and 16 references: 14 Soviet and 2 non-Soviet.

SUBMITTED: May 3, 1960

Card 3/3

KIZEVETTER, Ye.N.; KLEYN, P.N.; KHARCHEV, M.K. [deceased];  
VOLOBRINSKIY, S.D.; GRODSKIY, S.Ye.; YERMILOV, A.A.;  
KAYALOV, G.M.; LIVSHITS, D.S.; MAKSIMOV, A.A.; MESHEL',  
B.S.; MUKOSEYEV, Yu.L.; OGORODNOV, S.I.; ROZENBERG, V.A.;  
SHRAYBER, L.G.; ZALESSKIY, Yu.Ye., retsentent; IOKHVIDOV,  
E.S., retsentent; FEDOROV, A.A., retsentent; SAVEL'YEV,  
V.I., red.; LARIONOV, G.Ye., tekhn. red.

[Temporary instructions for determining the electrical loads  
of industrial enterprises] Vremennye rukovodiashchie ukaza-  
niia po opredeleniiu elektricheskikh nagruzok promyshlennyykh  
predpriatii. Moskva, Gosenergoizdat, 1962. 45 p.

(MIRA 16:2)

1. Russia (1923- U.S.S.R.) Glavnoye energeticheskoye uprav-  
leniye. 2. Leningradskoye otdeleniye Gosudarstvennogo pro-  
yektnogo instituta tyazheloy promyshlennosti (for Kizevetter,  
Kleyn, Kharchev). 3. Komissiya po elektricheskim nagruzkam  
Nauchno-tehnicheskogo obshchestva energeticheskoy promyshlen-  
nosti (for Volobrinskiy, Grodskiy, Yermilov, Kayalov, Livshits,  
Maksimov, Meshel, Mukoseyev, Ogorodnov, Rozenberg, Shrayber).  
(Electric power distribution)

GREYSUKH, M.V.; YERMILOV, A.A.; ZALESSKIY, Yu.Ye.; KAZYMOV, A.A.; KATSEVICH, L.S.; KIRPA, I.I.; KIREYEV, M.I.; KNYAZEVSKIY, B.A.; KOFMAN, K.D.; KRZHAVANIK, L.V.; KUZNETSOV, P.V.; MOROZOV, K.S.; RAKOVICH, I.I.; RYABOV, M.S.; SVENCHANSKIY, A.D.; SOKOLOV, M.M.; SYCHEV, L.I.; TVERDIN, L.M.; KHEYFITS, M.E.; SHULIMOV, Ye.V.; EPSHTEYN, L.M.; SHCHEGOL'KOV, Ye.I.; TSAPENKO, Ye.F.; FEDOROV, A.A., glav. red.; SERBINOVSKIY, G.V., red.; BOL'SHAM, Ya.M., red.; BRANDENBURGSKAYA, E.Ya., red.; TVERDIN, L.M., red.; FRIDKIN, L.M., tekhn. red.

[Handbook for power engineers of industrial enterprises in four volumes] Spravochnik energetika promyshlennyykh predpriiatii v chetyrekh tomakh. Moskva, Gosenergoizdat. Vol.2. [Electric-power supply (conclusion), use of electric power and electrical equipment in some branches of industry] Elektrosnabzhenie (okonchanie), priemniki elektroenergii i elektrooborudovaniye nekotorykh otraspeli promyshlennosti. Pod obshchey red. A.A.Fedorova (glav. red.), G.V.Serbinowskogo i IA.M.Bol'shama. 1963. 880 p. (MIRA 16:7)  
(Power engineering—Handbooks, manuals, etc.)  
(Electric power distribution)

ZHUKOVSKIY, P.M., otv. red.; TROSHIN, A.S., otv. red.; ASTAUROV, B.L., red.; ZHINKIN, L.N., red.; MATVEYEVA, T.S., red.; SAKHAROV, V.V., red.; FEDOROV, A.A., red.; CHUKSANOVA, N.A., red.

[Polypliody and breeding; transactions] Poliploidiia i se-lektsiia; trudy. Moskva, Nauka, 1965. 322 p.  
(MIRA 18:6)

1. Soveshchaniye po poliploidii, 1963. 2. Deystvitel'nyy chlen Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni V.I.Lenina (for Zhukovskiy). 3. Chlen-korrespondent AN SSSR (for all except Zhukovskiy).

L 20806-66 EWP(j)/EWT(m)/ETC(m)-6/T IJP(c) RM/NW

ACC NR: AP6005945 (A) SOURCE CODE: UR/0191/66/000/002/0010/0011

AUTHORS: Kirilovich, V. I.; Rubtsova, I. K.; Pokrovskiy, L. I.; Khinich, R. V.; Fedorov, A. A.

ORG: none

TITLE: Synthesis of phosphor-containing polyesters and their application in preparation of fireproof polyurethane foams

SOURCE: Plasticheskiye massy, no. 2, 1966, 10-11

TOPIC TAGS: polyester plastic, polyurethane, foam plastic, fire resistant material, phosphorous acid, esterification

ABSTRACT: Polytransesterification of dimethylphosphorous acid (I) with polyols (pentaerythritol, trimethylolpropane, trimethylethane) or of mixed polyols and diols in various ratios, has been investigated. This work is a continuation of a study of polyphosphite synthesis by V. I. Kirilovich, I. K. Rubtsova, and Ye. L. Gefter (Plast. massy, No. 7, 20, 1963), and was undertaken to test the suitability of polyesters in imparting fire-resistant properties to polyurethane foams. Reaction of the mixture of diols and polyols with I yields polyesters

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UDC: 678.664-496:678.029.65

L 20806-66

ACC NR: AP6005945

having viscosities similar to those of the polyurethane foams, i.e.,  $\eta^{25C} \leq 1000$  poise. The optimal ratio of viscosity and free hydroxyl groups in polyphosphites occurs with pentaerythritol:hexane-diol = 0.3:0.7 and pentaerythritol:diethylene glycol = 0.2:0.8. Of all polyphosphites obtained with individual polyols, poly-trimethylolpropane phosphite had the most acceptable viscosity. The use of metallic sodium as a catalyst permitted lowering of the initial reaction temperature, thus preventing excessive rise of the viscosity of the product. The resulting phosphor-containing polyurethane foams were self-extinguishing and thermally stable. Orig. art. has: 3 tables.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 008

Card 2/2

FEDOROV, A.A.

Conducting practical studies in mathematics in institutes of higher education. Uch zap. Ped inst Gerts. 197:280-292 '58. (MIRA 16:9)  
(Mathematics—Study and teaching)

STEPIN, Vasilii Vasil'yevich; SILAYEVA, Yelizaveta Vasil'yevna;  
PLISS, Anastasiya Mikhaylovna; KURBATOVA, Vera Ivanovna;  
KRYUCHKOVA, Lidiya Merkur'yevna; PONOSOV, Vladimir Il'ich;  
DYMOM, A.M., doktor khim. nauk, prof., red.; FEDOROV, A.A.,  
st. nauchn. sotr., red.; TKACHENKO, N.S., inzh., red.;  
DOBRZHANSKIY, A.V., st. inzh., red.; LEVIT, Ye.I., red.izd-  
va; ISLENT'YEVA, P.G., tekhn. red.

[Analysis of ferrous metals, alloys and manganese ores] Analiz chernykh metallov, splavov i mangantsevykh rud. [By] V.V. Stepin i dr. Moskva, Metallurgizdat, 1964. 498 p.

(MIRA 17:3)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii (for Dymov, Fedorov, Tkachenko, Dobrzhanskiy).

FEDOROV, A.A.; RODIONOVA, N.S.

Thermogravimetric study of the collecting agent  
 $(\text{MnO}_2)_x(\text{Fe}_2\text{O}_3)_y(\text{H}_2\text{O})_2$  used in separation of phosphorus.  
Zhur. anal.khim. 18 no.12;1504-1506 D '63. (MIRA 17:4)

1. Institut geokhimii i analiticheskoy khimii imeni Vernadskogo  
AN SSSR, Moskva.

FEDOROV, A.A.

Asymptotic diffraction formulas for a sphere with random placement of  
the source and observation point. Radiotekh. i elektron. 9 no.9:1702-  
1706 S '64. (MIRA 17:10)

Determination of Titanium, Niobium and Zirconium in Alloy Steels. A. A. Fyodoruk. (Zavodskaya Laboratoriya, 1939, No. 8, pp. 807-809). (In Russian). The "Steeloscope" spectrometer, the conditions and suitable lines for the determination of titanium, niobium and zirconium in alloy steels are described.

**APPROVED FOR RELEASE: 03/20/2001**

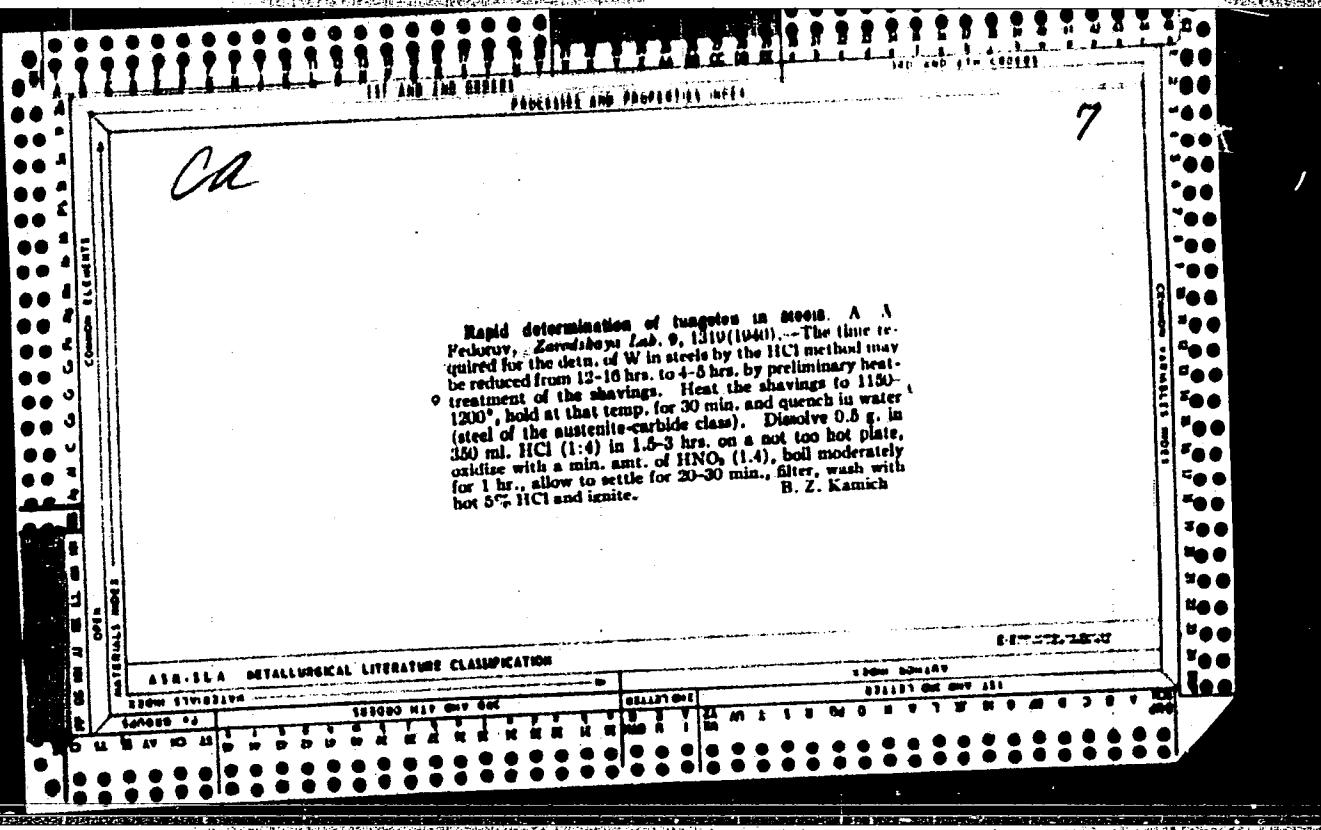
CIA-RDP86-00513R000412610018-8"

Determination of titanium, columbium and zirconium in steel alloys by means of a stereoscope at the plant "electrostal." A. Fedorov. *Bull. acad. sci. U. R. S. S. Ser. phys.*, 6, 212-15 (1940).—A semiquantitative method of analyzing steel alloys for Ti, Nb and Zr by means of a stereoscope is developed. In order to find the convenient spectral lines for the analysis, the region of spectra from 4200 to 6100 Å was investigated. A no. of lines were found suitable for different percentages of the elements studied.

### Rock Island Gem

## 010-014 METALLURGICAL LITERATURE CLASSIFICATION

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CA

151 AND 152 INDEX

PROCESSES AND PREPARATIONS INDEX

6

Preparing rubidium and cesium by reducing their chlorides. V. D. Polyakov and A. A. Rohtling. *J. Russ. Phys. Chem. (U. S. S. R.)* 13, 1833-4 (1940).—Mixts. of RbCl or CsCl with CaCl<sub>2</sub> heated to 700-800° in vacuo gave 78% yields of the alkali metal, which was collected in a glass receiver. The app. is described and illustrated.

A. A. Rohtling

ASG-31A METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000

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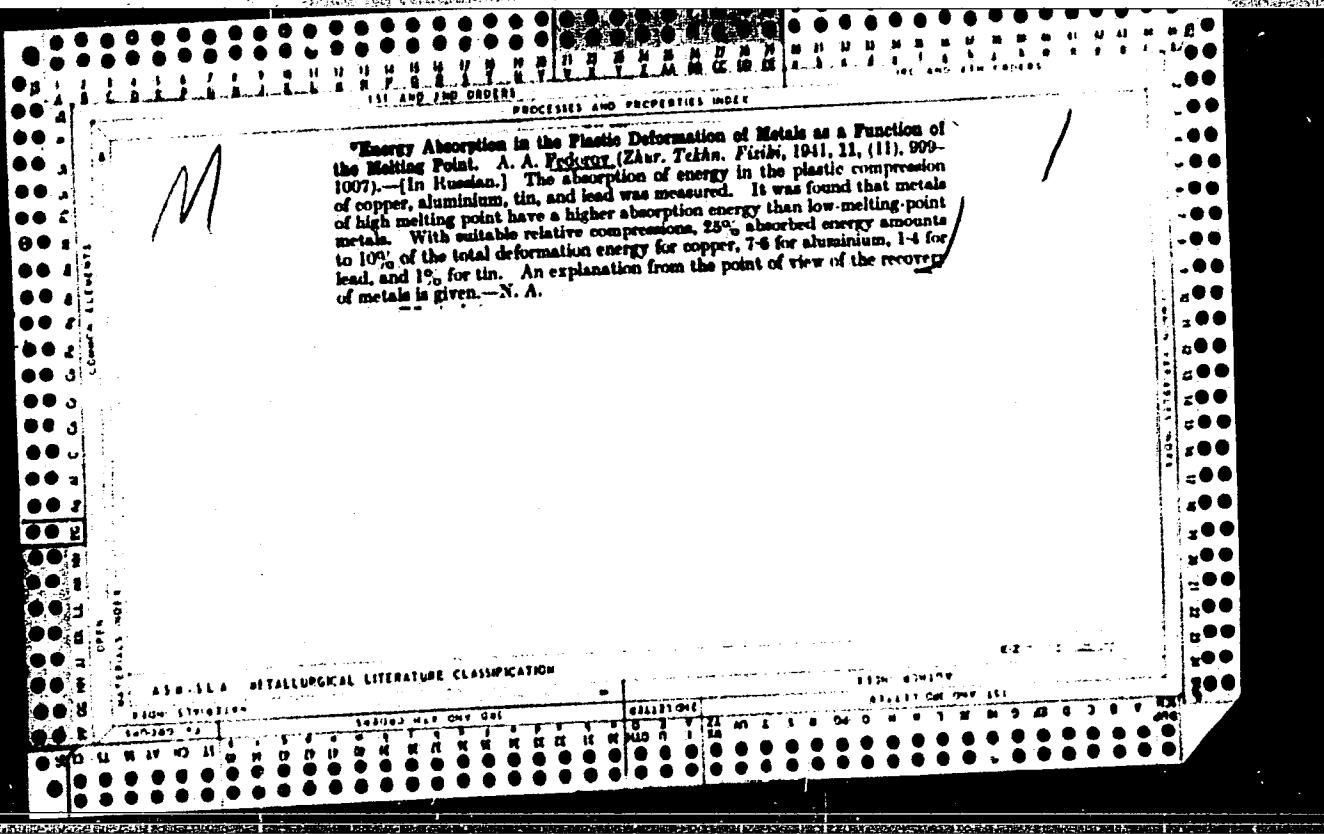
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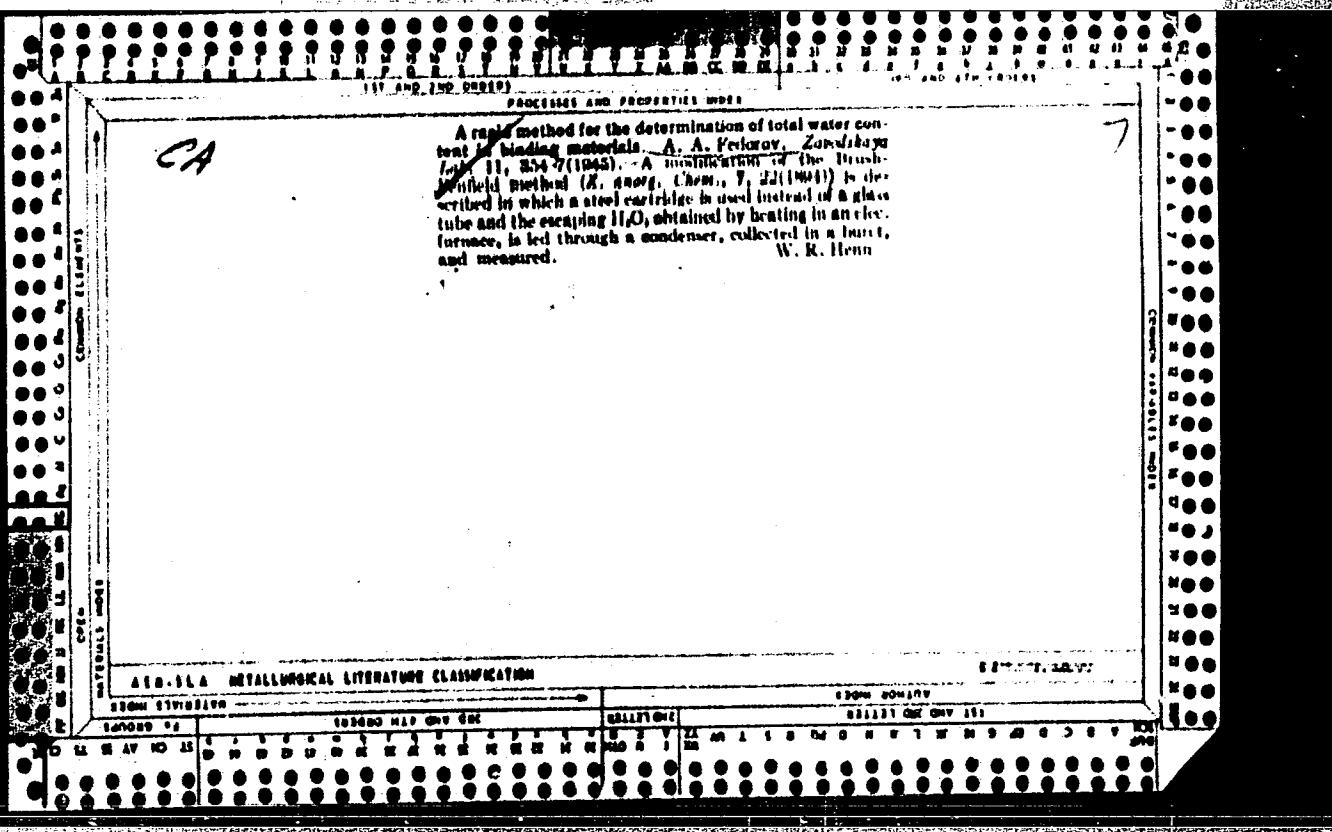
A rapid method for the determination of the hygroscopic moisture in molding materials. A. A. Yakovlev. *Zemsljnoe Lab.*, 10, No. 1, 66 (1941); *Chem. Zentral.*, 1943, 1, 1014.—In connection with the method of Kugel (cf. C. A. 32, 1323a) the following procedure is recommended for such materials as coal, coke, graphite or iron: A sample (2 or 8 g.) of definite grain size is treated with 10 g. of  $\text{CaCl}_2$  and the increase in pressure due to the  $\text{CaCl}_2$  evolved is measured.

## APPENDIX METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R000412610018-8"





31729

55300

S/081/61/000/021/030/094  
B101/B147AUTHORS: Fedorov, A. A., Ozerskaya, F. A., Malinina, R. D., Sokolova, Z. M., Linkova, F. V.

TITLE: Determination of manganese, iron, nickel, and lead contents in pure electrolytic chromium

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 21, 1961, 112, abstract 21D113 (Sb. tr. Tsentr. n.-i. in-t chernoy metallurgii, no. 19, 1960, 7 - 21)

TEXT: Methods for determining Mn, Fe, Ni, and Pb in highly pure electrolytic chromium have been developed. Mn determination is based on removing Cr from perchloric acid solution as  $\text{CrO}_2\text{Cl}_2$  and photometrically determining the violet color of  $\text{MnO}_4^-$  forming after oxidation of manganese by means of periodate. 0.5 g (0.02 - 0.04% Mn) or 1g (0.001 - 0.02% Mn) of chromium is dissolved in 30 milliliters (ml) of concentrated HCl and 30 ml of  $\text{HClO}_4$  (specific gravity 1.67). The solution is evaporated, concentrated HCl is added, and the substance is heated until the Card 1/3

31729

S/081/61/000/021/030/094  
B101/B147

Determination of manganese...

liberation of  $\text{CrO}_2\text{Cl}_2$  vapors has stopped. This process is repeated. The dry residue is dissolved in 5 ml of concentrated HCl, 15 ml of  $\text{H}_2\text{SO}_4$  (1:4) is added, and the substance is heated until white  $\text{H}_2\text{SO}_4$  fume has been formed. After cooling, the salt deposits are dissolved in a minimum amount of water, the solution is filtered, and evaporated to 15 - 20 ml. The residue is mixed with 1 ml of concentrated  $\text{H}_3\text{PO}_4$ , 20 ml of 2.5%  $\text{KIO}_4$  solution, boiled for 5 - 8 min, moderately heated for another 15 - 20 min, cooled, diluted with water to 50 ml, and photometrically measured with a green light filter in a 5-cm cuvette, a standard solution serving for comparison. For determining Fe (0.002 - 0.1%), 0.5 - 2 g of the sample is dissolved in  $\text{H}_2\text{SO}_4$  (1:4), the  $\text{Cr}^{3+}$  is oxidized with ammonium persulfate to  $\text{Cr}^{6+}$ , and iron and aluminum (as collector) are precipitated with  $\text{NH}_3$ . The precipitate is dissolved, and Fe photometrically determined with o-phenanthroline. Determination of Ni (0.001 - 0.1%) includes its separation from Cr by extracting the

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31729

S/081/61/000/021/030/094  
B101/B147

Determination of manganese...

nickel dimethyl glyoximate with chloroform from weakly ammoniacal solution, re-extraction of Ni, and photometric determination with dimethyl glyoxime in alkaline medium in the presence of an oxidizing agent. For determining Pb, the latter is coprecipitated by means of  $H_2S$  with Cu (as collector).

After separation from Cu by precipitation (together with Fe) by means of  $NH_4OH$  solution, polarographic determination is performed in hydrochloric acid solution containing NaCl. The effect of atmospheric oxygen, Sb, Bi, Cu, and  $Fe^{3+}$  is eliminated by metallic iron reduced with hydrogen.  
[Abstracter's note: Complete translation.]

X

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FEDOROV, A. A.

102  
PHASE I BOOK EXPLOITATION SOV/5592

Vsesoyuznoye soveshchaniye po vnedreniyu radioaktivnykh izotopov i yadernykh izlucheniy v narodnom khozyaystve SSSR. Riga, 1960.

Radioaktivnyye izotopy i yadernyye izlucheniya v narodnom khozyaystve SSSR; trudy Vsesoyuznogo soveshchaniya 12 - 16 aprelya 1960 g. g. Riga, v 4 tomakh. t. 4: Poiski, razvedka i razrabotka poleznykh iskopayemykh (Radioactive Isotopes and Nuclear Radiation in the National Economy of the USSR; Transactions on the Symposium Held in Riga, April 12 - 16, 1960; in 4 volumes. v. 4: Prospecting, Surveying, and Mining of Mineral Deposits) Moscow, Gostoptekhizdat, 1961. 284 p. 3,640 copies printed.

Sponsoring Agency: Gosudarstvennyy nauchno-tekhnicheskiy komitet Soveta Ministrov SSSR. Gosudarstvennyy komitet Soveta Ministrov SSSR po ispol'zovaniyu atomnoy energii

Eds. (Title page): N. A. Petrov, L. I. Petrenko, and P. S. Savitskiy; ed. of this volume: M. A. Speranskiy; Scientific ed.: M. A. Speranskiy; Executive Eds.: N. N. Kuz'mina and A. G. Ionel';

Card 1/11

Radioactive Isotopes and Nuclear (Cont.)

SOV/5592

Tech. Ed.: A. S. Polosina.

PURPOSE : The book is intended for engineers and technicians dealing with the problems involved in the application of radioactive isotopes and nuclear radiation.

COVERAGE: This collection of 39 articles is Vol. 4 of the Transactions of the All-Union Conference of the Introduction of Radioactive Isotopes and Nuclear Reactions in the National Economy of the USSR. The Conference was called by the Gosudarstvennyy nauchno-tekhnicheskiy komitet Sovet Ministrov SSSR (State Scientific-Technical Committee of the Council of Ministers of the USSR), Academy of Sciences USSR, Gosplan SSSR (State Planning Committee of the Council of Ministers of the USSR), Gosudarstvennyy komitet Svetla Ministrov SSSR po avtomatizatsii i mashinostroyeniyu (State Committee of the Council of Ministers of the USSR for Automation and Machine Building), and the Council of Ministers of the Latvian SSR. The reports summarized in this publication deal with the advantages, prospects, and

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## Radioactive Isotopes and Nuclear (Cont.)

SOV/5592

development of radioactive methods used in prospecting, surveying, and mining of ores. Individual reports present the results of the latest scientific research on the development and improvement of the theory, methodology, and technology of radiometric investigations. Application of radioactive methods in the field of engineering geology, hydrology, and the control of ore enrichment processes is analyzed. No personalities are mentioned. There are no references.

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YAKOVLEV, Pavel Yakovlevich, kand. khim. nauk; FEDOROV, Aleksey Alekseyevich, inzh.; BUYANOV, Nikolay Vasil'yevich, kand. tekhn. nauk; DYMOM, A.M., dokt. khim. nauk, prof., retsenzent; SHEMYAKIN, F.M., dokt., khim. nauk, prof., retsensenzent; KHARLAMOV, I.P., kand. tekhn. nauk, retsenzent; VENETSKIY, S.I., red. izd-va; KLEYNMAN, M.R., tekhn. red.

[Analysis of data on metallurgical production; determination of microimpurities] Analiz materialov metallurgicheskogo proizvodstva; opredelenie mikroimpuresej. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1961. 316 p. (MIRA 14:7)  
(Metals—Analysis)

S/032/61/027/002/002/026  
B134/B206

AUTHORS: Fedorov, A. A. and Ozerskaya, F. A.

TITLE: Determination of cerium in medium- and highly alloyed steels

PERIODICAL: Zavodskaya laboratoriya, v. 27, no. 2, 1961, 139-140

TEXT: The methods described in publications (Refs. 1-3) do not permit a quantitative cerium determination in the presence of certain alloyed elements. In the present case, the disturbing effect of other elements on the cerium determination was prevented by the cerium being precipitated as a fluoride and  $\text{CaF}_2$  being used as a collector. Since even small amounts of mineral acids impair this precipitation, it is recommended to dissolve the sample in hydrofluoric acid with addition of  $\text{H}_2\text{O}_2$ . The final determination of cerium is made colorimetrically (Ref. 4) by forming the complex compound  $\text{Na}_5[\text{Ce}(\text{C}_6\text{H}_5\text{O}_7)_3]$  by means of potassium citrate in alkaline medium beside  $\text{H}_2\text{O}_2$ . In order to prevent coagulation of this yellow-colored complex compound, a mixture of boric acid or glycerin with

Card 1/2

Determination of cerium ...

S/032/61/027/002/002/026  
B134/B206

Trilon B (Ref. 5) can be added. The method described was tested on steel samples to which certain amounts of a cerium nitrate standard solution were added. This cerium determination can also be made by the spectroscopic method. In this case, cerium is precipitated as a fluoride with the application of calcium as a collector, the precipitate being ignited at 450-500°C. The following deviations from the mean value for three parallel determinations of cerium in steel are mentioned as maximum: 0.005% at a content of 0.01-0.03% Ce; 0.007% at 0.03-0.06% Ce; 0.009% at 0.06-0.10% Ce. There are 1 table and 5 references: 4 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii im. I. P. Bardina  
(Central Scientific Research Institute of Ferrous Metallurgy imeni I. P. Bardin)

Card 2/2

S/032/61/027/012/001/015  
B145 / B147

AUTHORS:

Fedorov, A. A., Krichevskaya, A. M., and Linkova, F. V.

TITLE:

Determination of sulfur in metallic chromium

PERIODICAL:

Zavodskaya laboratoriya, v. 27, no. 12, 1961, 1460 - 1462

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reaction vessel of quartz is cooled (-1 to -50C). 0.5 - 1 g of the sample is dissolved in 30 milliliters of orthophosphoric acid in an N<sub>2</sub> atmosphere

- Soviet follows: A.

FEDOROV, A.A.; SOKOLOVA, G.P.

Determination of aluminum (0.002 - 0.1 percent) in carbon and  
low alloy steels. Sbor. trud. TSNIICHM no.24:128-129 '62.

(Steel--Analysis) (Aluminum--Analysis) (MIRA 15:6)

FEDOROV, A.A.; OZERSKAYA, F.A.

Photocolorimetric determination of cerium in medium-alloy and  
high-alloy steels. Sbor. trud. TSNIICHM no.24:130-132 '62.

(MIRA 15:6)

(Steel alloys--Analysis) (Cerium--Analysis)

FEDOROV, A.A.; LINKOVA, F.V.

Determination of tellurium in carbon steels, Sbor. trud.  
TSNIICHM no.24:147-149 '62. (MIRA 15:6)  
(Steel—Analysis) (Tellurium analysis)

S/776/62/000/024/001/007  
E021/E483

AUTHOR: Fedorov, A.A.

TITLE: Determination of phosphorus (0.05 to 0.5%) in metallic niobium and ferro-niobium

SOURCE: Moscow, Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii. Sbornik trudov. no.24. 1962. Novyye metody ispytaniy metallov. 150-163

TEXT: A new method of determining small (0.05 to 0.5%) quantities of phosphorus in niobium and ferro-niobium is described. Although more accurate than those developed in the past, the method is relatively simple - one determination requiring 1.5 to 2 hours as compared with 2 to 3 days required by a method developed by MIS. The new method is based on the formation of yellow phosphoro-molybdic hetero-polyacid  $H_3[P(Mo_3O_10)_4] \cdot nH_2O$  and its subsequent reduction in an acid medium by divalent Fe (in the presence of sulphurous acid) to a blue compound. The acidity of the solution in which the blue compound is formed is such that the silico-molybdic and arsenous-molybdic hetero-polyacids are destroyed; this makes it possible to determine P in the presence of both Si and As. In the first stage of the analysis a weighed quantity

Card 1/2

Determination of phosphorous ...

S/776/62/000/024/001/007  
E021/E483

of the material is dissolved in a  $\text{HNO}_3/\text{HF}$  mixture. The lower valency P compounds are oxidized to orthophosphoric acid by potassium permanganate, the excess of the latter being reduced by sodium nitrite. To separate P from Fe and Nb (the latter forming a complex with HF) it is precipitated as phosphoro-molybdate which is then dissolved in an ammonia solution containing tartaric and boric acids; tartaric acid holds in solution traces of Nb trapped in the phosphoro-molybdate precipitate, and boric acid combines with small quantities of the fluorine ions, also co-precipitated with phosphoro-molybdate, to form the  $\text{HBF}_4$  complex. Further determination of phosphorous is carried out by photo-colorimetry according to the reaction described above. The accuracy of the method, suitable for use on materials with high Nb contents, has been checked by a radiometric method using the  $\text{P}^{32}$  isotope. The new method has been adopted at TsNIIChM and at several metallurgical plants as a standard analytical technique. There are 1 figure and 5 tables.

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FEDOROV, A.A.; TIKHOMIROVA, O.F.; STREBULAYEVA, Ye.N.; CHERENOVA, O.I.

Determination of silicon in ferroniobium, niobium pentoxide,  
and in nickel-niobium alloys. Sbor. trud. TSNIICHM no.24:  
164-167 '62. (MIRA 15:6)  
(Niobium oxide--Analysis) (Niobium alloys--Analysis)  
(Silicon--Analysis)

FEDOROV, A.A.; LINKOVA, F.V.

Determination of aluminum oxide in aluminum metal. Sbor. trud.  
TSNIICHM no.24:172-178 '62. (MIRA 15:6)  
(Aluminum--Analysis) (Aluminum oxide--Analysis)

FEDOROV, A.A.; BUYANOV, N.V.; LINKOVA, F.V.; SUKHOVA, N.P.

Spectrochemical determination of hafnium (0.5 - 90 percent)  
in zirconium-hafnium and zirconium-titanium-hafnium alloys.  
Sbor. trud. TSNIICHM no.24:188-190 '62. (MIRA 15:6)  
(Zirconium-hafnium alloys--Spectra) (Hafnium--Spectra)

FEDOROV, A.A.; SERGEYEV, V.

"Some methods of analysis used in ferroalloy plants" by M.V.Babaev.  
Reviewed by A.A.Fedorov and V.Sergeev. Zav.lab. 28 no.11:1403-  
1404 '62. (MIRA 15:11)

1. Nachal'nik TSentral'noy khimicheskoy laboratorii Zaporozhskogo  
zavoda ferrosplavov (for Sergeyev).  
(Iron alloys) (Metallurgical analysis) (Babaev, M.V.)

FEDOROV, A.A., OZERSKAYA, F.A., STREBULAYEVA, Ye.N.

Trilonometric determination of calcium oxide in slags using  
fluorescein-complexon. Zav.lab. 29 no.7:794 '63. (MIRA 16:8)

1. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy  
metallurgii im. I.P.Bardina.  
(Calcium oxide) (Acetic acid) (Slag)

FEDOROV, A.A.; SOKOLOVA, G.P.

Determining aluminum (0.1 - 5 % in certain steels, alloys, and  
metals. Sbor.trud. TSNIIICHM no.31:162-169 '63. (MIRA 16:7)  
(Metals--Analysis) (Aluminum--Analysis)

FEDOROV, A.A.; OZERSKAYA, F.A.; STREBULAYEVA, Ye.N.

Using fluorexon as indicator in the trilonometric analysis of slags.  
Sbor. trud. TSNIICHM no.31:170-172 '63. (MIRA 16:7)  
(Fluþrexon) (Slag--Analysis)

FEDOROV, A.A.; SOKOLOVA, O.P.

Determining phosphorus in metal chromium, ferrochromium, and  
chromite ores. Sbor. trud. TSNIIChM no.31:175-179 '63. (MIRA 16:7)  
(Chromium—Analysis) (Iron-chromium alloys—Analysis)  
(Phosphorus—Analysis)

FEDOROV, A.A.; OZERSKAYA, F.A.

Trilonometric determination of aluminum oxide in slags with the  
use of a xylenol orange indicator. Sbor.trud. TSNIICHM no.31:  
195-196 '63 (MIRA 16:7)

(Aluminum oxide--Analysis)

FEDOROV, A.A.; OZERSKAYA, F.A.; LINKOVA, F.V.

Determining micro- and macroquantities of rare-earth elements. Sbor.-  
trud. TSNIICHM no.31:197-199 '63. (MIRA 16:7)  
(Rare-earth metals—Analysis)

L 14979-65 EWT(m)/EFP(n)-2/EPA(bb)-2/EWP(b) Pu-44 ASD(a)-5/AEFL/SSD/AEDC(b)/  
ASD(m)-3/AFIC(p)/RAEM(1)/ESD(gs)/ESD(t) JD/kW/JG/MLK  
ACCESSION NR: AT4048093 S/0000/64/000/000/0017/0018

AUTHOR: Fedorov, A. A., Buyanov, N. V., Linkova, F. V., Sukhova, N. P. B

TITLE: Spectrochemical determination of hafnium in zirconium-hafnium and zirconium-titanium-hafnium alloys 27 27

SOURCE: Spektral'nye i khimicheskiye metody analiza materialov (Spectral and chemical methods of materials analysis); sbornik metodik. Moscow, Izd-vo Metallurgiya, 1964, 17-18

TOPIC TAGS: titanium alloy, spectroscopy, hafnium determination, hafnium alloy, zirconium alloy

ABSTRACT: The spectrochemical method used for the determination of hafnium in Zr-Hf and Zr-Ti-Hf alloys differs from the earlier methods, in that the alloy sample was dissolved in a mixture of acids, after which the hydroxides were precipitated by ammonia and calcined until the formation of oxides. Analysis was by a spectroscopic method. This method is suitable for determining 0.5 - 90% Hf; the relative error of the method for 0.5-2, 2-10, 10-40 and 40-90 % Hf is 10, 4, 2.5 and 2%, respectively. The sensitivity of the method is 0.1%. The preparation of the sample is described. The spectral

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L 14979-65  
ACCESSION NR: AT4048093

analysis was carried out on the ISP-22 spectrograph with a one-lens condenser and a 0.01 mm aperture width. The distance from the lens to the light source was 15 cm, and to the spectrograph aperture, 75 cm. The light source was a spark generator (G-2, C=6.01 microfarad, L=0.01 microhenry, spark gap 3 mm, I=1.7 amps, the distance between the carbon electrodes = 1.5 m. For the determination of 0.5-10% Hf, the pair of lines Hf 2861.70 - Zr 2856.06 Å were used; for 10-90% Hf, the pair Hf 2861.012 - Zr 2810.914 Å were used instead. The experimental data are tabulated. Orig. art. has 1 table.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii im. I. P. Bardina (Central Scientific Research Institute of Ferrous Metallurgy)

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ACCESSION NR: AT6012932

UR/2776/64/000/037/0025/0032 //

AUTHOR: Fedorov, A.A.

TITLE: Determination of microquantities of phosphorus in iron metal, iron ores, and nickel metal

SOURCE: Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii. Sbornik trudov, no. 37, 1964. Novyye metody ispytaniy metallov; khimicheskiy kontrol' v metallurgii (New methods in the analysis of metals; chemical control in metallurgy), 25-32

TOPIC TAGS: phosphorus determination, phosphorus admixture, iron analysis, nickel analysis, iron ore analysis, phosphorus precipitation

ABSTRACT: An effective method of separating phosphorus from iron and nickel is the precipitation of phosphorus with a collector of the composition  $(\text{MnO}_2)_x(\text{Fe}_2\text{O}_3)_y(\text{H}_2\text{O})$  from dilute nitric acid solution. The precipitate is formed by the reaction of manganese irons with potassium permanganate in the presence of ferric ions; at the same time, the permanganate oxidizes the compounds of trivalent phosphorus to orthophosphoric acid. It was found that boiling of the solution (5 min) promotes a complete trapping of phosphorus by the chosen collector. The collector most suitable for the coprecipitation of phosphate ions over the widest acidity range (2.5 to 27%  $\text{HNO}_3$  by vol.) is formed by the reaction

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between 0.4 g Mn<sup>2+</sup>, 0.7 g Fe<sup>3+</sup>, and 2 g of KMnO<sub>4</sub> in 300 ml of solution. The collector contains up to 0.3 g Fe and up to 1.2 g Mn. These optimum conditions can be somewhat modified when microquantities of phosphorus are determined. Although the collector is a compound of variable composition, the concentration of the elements entering into the composition of the precipitates lies within fairly narrow limits. Analytical procedures for the determination of 0.0004-0.012% phosphorus in iron metal, 0.0004-0.012% phosphorus in iron ores, and 0.0002-0.006% phosphorus in nickel metal, based on the above method, are described in detail. Orig. art. has: 4 figures and 3 tables.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii,  
Moscow (Central Scientific Research Institute for Ferrous Metallurgy)

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ENCL: 00

SUB CODE: IC, MM

NO REF Sov: 004

OTHER: 002

PC

Card 2/2

AUTHOR: Fedorov, A. A., Sorokina, N. N.

## **TITLE: Spectrochemical determination of samarium, gadolinium, dysprosium, erbium, and scandium (0.01-0.6%) in steels and alloys**

TABLE I. X-RAY ANALYSES OF RARE EARTH ALLOYS AND OF IRON-CONTAINING STEEL.

A quasi-triangular method was developed for the solution of the system of equations (1.1) and (1.2) in the case of a small number of nodes.

## CHAPTER 14. INTERPOLATION METHODS

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L 16400-65

ACCESSION NR: AP5016096

$2 \times 10^{-3}$  to  $8 \times 10^{-2}$  %, respectively. The method was thus shown to be completely  
The authors express their appreciation to Z. M. Skolcova, M. M. Golubeva,  
etc., who participated in this work.

NO REF Sov: 001

OTHER: 000

2/2/04

Card

FEDOROV, A.A. (Shchelkovo, Moskovskoy oblasti, ul. Pushkina, 16, kv.4)

Osteosynthesis of the clavicle with capron thread. Vest. khir.  
92 no.6:104 Je '64. (MIRA 18:5)

1. Iz khirurgicheskogo otdeleniya (zav. - zasluzhennyj vrach  
RSFSR A.A. Fedorov) Shchelkovskoy gorodskoy bol'nitsy (glavnnyj  
vrach - A.F. Pavlova).

"APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R000412610018-8

FEDOROV, A. A., Engr. Cand. Tech. Sci.

Dissertation: "Fundamentals of Technical Exploitation of the Electrical Equipment in Industrial Enterprises." Moscow Order of Lenin Power Engineering Inst imeni V. M. Molotov, 20 Jun 47.

SO: Vechernaya Moskva, Jun, 1947 (Project #17836)

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GUSEV, S.A., inzh.; ZHUKHOVITSKIY, B.Ya., kand.tekhn.nauk; ZARIN, D.D., kand.tekhn.nauk; IVANOV-SMOLENSKIY, A.V., kand.tekhn.nauk; KNYAZEVSKIY, B.A., kand.tekhn.nauk; KUZNETSOV, A.I., inzh.; KOZIS, V.L., kand.tekhn.nauk; KORYTIN, A.A., inzh.; LASHKOV, F.P., inzh.; L'VOV, Ye.L., kand.tekhn.nauk; MELESHKINA, L.P., kand.tekhn.nauk; NEKRASOVA, N.M., kand.tekhn.nauk; NIKULIN, N.V., kand.tekhn.nauk; POLEVOY, V.A., kand.teknicheskikh nauk; RAZEVIG, D.V., kand.tekhn.nauk; ROZANOV, G.M., kand.tekhn. nauk; RUMSHISKIY, L.Z., kand.fiz.-matem.nauk; SVISTOV, N.K., kand.tekhn.nauk; SIROTINSKIY, Ye.L., kand.tekhn.nauk; SOKOLOV, M.M., kand.tekhn.nauk; TALITSKIY, A.V., prof.; TREMBACH, V.V., inzh.; FEDOROV, A.A., kand.tekhn.nauk; GRUDINSKIY, P.G., prof.; PRYTKOV, V.T., kand.tekhn.nauk; CHILIKIN, M.G., prof., glavnnyy red.; GOLOVAN, A.T., prof., red.; PETROV, G.N., prof., red.; FEDOSEYEV, A.M., prof., red.; ANTIK, I.V., red.; SKVORTSOV, I.M., tekhn.red.

[Handbook for electric engineering] Elektrotekhnicheskii spravochnik. Moskva, Gos.energ.iud-vo, 1952. 640 p. (MIRA 13:2)

1. Prepodavateli Moskovskogo energeticheskogo instituta imeni V.M. Molotova (for all except Antik, Skvortsov).  
(Electric engineering)

PATSIORA, P.P., dotsent, kandidat tekhnicheskikh nauk; MAKAROCHKIN, I.M.,  
retsensent; HADBAKH, M.P., retsensent; FEDOROV, A.A., redaktor;  
VOLKHOVSKIY, R.S., tekhnicheskiy redaktor

[Electric equipment in the forest industries] Elektrooborudovanie  
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SMO3

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redaktor.

[Reference book for the electrician in industrial plants] Spravochnik elektrika promyshlennykh predpriatii. Pod obshchey red. A.A. Fedorova i P.V. Kuznetsova. Moskva, Gos. energ. izd-vo, 1954. 1040 p.  
(Electric engineering) (MLRA 7:10)

FEDOROV, A.A., dotsent, kandidat tekhnicheskikh nauk; KNYAZEVSKIY, B.A.,  
dotsent, kandidat tekhnicheskikh nauk.

Book on the electric power supply of industrial enterprises.  
Elektrichesstvo no.6:85-86 Je '54. (MLRA 7:7)  
(Electric power distribution)

FEDOROV, Anatoliy Anatol'yevich; VERTEHENYY, V.I., redaktor; LARIONOV, G.Ye.,  
tekhnicheskly redaktor.

[Supplying industrial establishments with electricity] Elektrosnab-  
zhenie promyshlennyykh predpriatii. Izd.2-oe, perer. i dop. Moskva,  
Gos.energ. izd-vo, 1956. 463 p. (MLRA 9:5)  
(Electric power)

AUTHOR: Fedorov, A.A. (Candidate of Technical Sciences) 94-2-2/27

TITLE: On the use of 20 kV in industry (O primenii v promyshlennosti napryazheniya 20 kV)

PERIODICAL: Promyshlennaya Energetika, 1958, Vol.13. No.2. pp.5-6 (USSR)

ABSTRACT: This short article first presents the arguments against voltages of 10 kV or 30 kV and in favour of 20 kV for supply to industry. These are, that the transmission lines are cheap and simple, conductor copper is economised, 20 kV cables cost little more than 10 kV cables, and line conductors can be of steel. Also, 20 kV is convenient for supply to large towns and agricultural districts. The economy of capital resources by using 20 kV is argued from rough calculations of costs for power systems near Moscow and in an agricultural district. In both cases, the mean consumption of non-ferrous metal for the 20 kV scheme was only half that for the 10 kV scheme, and the power losses were 2 - 2.5 times less. Figures for capital and running costs and consumption of non-ferrous metal at different supply voltages are tabulated for various industries. There is 1 table.

ASSOCIATION: Moscow Power Institute. (Moskovskiy energeticheskiy Institut).

AVAILABLE: Library of Congress.

Card 1/1 1. Electrical systems-Design 2. Electrical engineering-USSR  
3. Electrical equipment-Selection 4. Voltage-Selection

YERMILOV, A.A., inzh; SEULIN, N.A., inzh; CHIZHISHIN, P.L., inzh.; CHEPELE, Yu.M.; inzh.; MUSATOV, T.P., inzh.; FEDOROV, A.A., kand.tekhn.nauk; YAROSHETSKIY, L.M., inzh.; GOL'DENBLAT, B.I., inzh.; KUDRYASHOV, S.A., inzh.; ZAKHAROV, N.N., inzh.; SHCHUKIN, B.D., inzh.

Improving planning of industrial power supply. Prom. energ. 13 no.7: 18-29 Jl. '58. (MIREA 11:10)

1.Tyazhpromelektroproyekt. (for Yermilov). 2.Zhempreyekta, g.Kaunas (for Chepele). Denbassenergo (for Musatov). 4.Moskovskiy energeticheskiy institut (for Fedorov). 5.Usgiprevedkhoz. 6.Tashkent (for Yaroshetskiy). 6.Proyektnyy institut Ministerstva stroitel'stva USSR, Odessa (for Gol'denblat). 7.Elektrproyekt, g.Kuybyshev (for Kudryashov). 8.Gosradioelektronika (for Zakharov). 9. Bidproyekt, g. Kuybyshev (for Shchukin).

(Electric power)

FEDOROV, Anatoliy Anatol'yevich, dots.

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Calculation of losses in triple-wound power transformers. Prom.  
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FEDOROV, Anatoliy Anatoliyevich. Prinimali uchastiye: AFANAS'YEV, N.P.; KAMENEVA, V.V., inzh. GRUDINSKIY, P.G., prof., retsentent; SERBINOVSKIY, G.V., dotsent, retsentent; BOCHAROV, V.I., dotsent, kand.tekhn.nauk, retsentent; VORONIN, K.P., tekhn.red.

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1. Frunzenskiy politekhnicheskiy institut (for Bocharov).  
(Electric power distribution)

FEDOROV A A

BACHURIN, N.I., inzh.; VOLKOV, S.S., inzh.; GORODETSKIY, S.S., prof., doktor tekhn. nauk; GUSEV, S.A., dotsent, kand. tekhn. nauk; ZHUKHOVITSKIY, B.Ya., dots., kand. tekhn. nauk; IVANOV-SMOLENSKIY, A.V., dots., kand. tekhn. nauk; KIFER, I.I., dots., kand. tekhn. nauk; KORYTIN, A.A., starshiy prepodavatel'; KULIKOV, F.V., dots.; NIKULIN, N.V., dots., kand. tekhn. nauk; PODMAR'KOV, A.N., dots.; PRIVEZENTSEV, V.A., prof., doktor tekhn. nauk; RUMSHINSKIY, L.A., dots., kand. fiz.-mat. nauk; SOBOLEV, V.D., dots., kand. tekhn. nauk; URLAPOVA, M.N., inzh.; TIKHOMIROV, P.M., dots., kand. tekhn. nauk; FEDOROV, A.A., dots., kand. tekhn. nauk; CHUNIKHIN, A.A., dots., kand. tekhn. nauk; CHILIKIN, M.G., prof., glav. red.; GOLOVAN, A.T., prof., red.; GRUDINSKIY, P.G., prof., red.; PETROV, G.N., prof., doktor tekhn. nauk, red.; FEDOSEYEV, A.M., prof., red.; ANTIK, I.V., inzh., red.; BORUNOV, N.I., tekhn. red.

[Electrical engineering handbook] Elektrotekhnicheskii spravochnik. 3., perer. i dop. izd. Pod obshchei red. A.T. Golovana i dr. Moskva, Gosenergoizdat. Vol.1. 1962. 732 p. (MIRA 15:10)

1. Moskovskiy energeticheskiy institut (for Golovan, Grudinskiy, Petrov, Fedoseyev, Chilikin, Antik).  
(Electric engineering—Handbooks, manuals, etc.)

FEDOROV, A.A.

Successful treatment of gangrenous stomatitis with novocaine  
block and antibiotics. Khirurgiia Supplement:56 '57. (MIRA 11:4)

1. Iz Dzhankoyskoy rayonnoy bol'nitsy Krymskoy oblasti.  
(STOMATITIS) (NOVOCAINE) (ANTIBIOTICS)

PICHUGIN, A.A., dotsent, kand.tekhn.nauk; BOCHAROV, Ye.V., inzh.. Prini-  
mali uchastiye: KUZ'MINSKIY, A.G., inzh.; VORONKINA, M.A., inzh.;  
FEDOROV, A.A., inzh.; BELOUSOV, M.A., inzh.ekonomist; PROSVIRNIN,  
G.V., inzh.; KNIGINA, G.I., dotsent, kand.tekhn.nauk; LESNIKOV,  
V.V., dotsent, kand.tekhn.nauk; SIDOROV, A.K., dotsent, kand.  
arkhitektury; KARTASHOV, A.A., arkitektor; BARITSKIY, F.F., dotsent,  
kand.tekhn.nauk; KULISHOV, D.A., prof.; ZDESENKO, G.M., kand.tekhn.  
nauk; ALEKSANDRANKO, A.I., dotsent, kand.tekhn.nauk; STREL'NIKOV,  
G.Ye., kand.tekhn.nauk; VANEYEV, V.A., assistant; CHEREPKO, P.A.,  
dotsent. SUSHINSKIKH, A.F., inzh., retsenzent; MEN'SHIKOV, P.N.,  
red.; SUBBOTINA, G.M., tekhn.red.

[Manual for rural builders] Spravochnik proizvoditelia rabot  
sel'skokhoziaistvennogo stroitel'stva. Novosibirsk, Novosibirskoe  
knizhnoe izd-vo. Vol.1. 1959. 673 p. Vol.2. 1959. 677-1191 p.  
(MIRI 13:2)

(Farm buildings)

FEDOROV, A.A.

Effect of perforations on the external pressure resistance of  
pipes. Izv.vys.ucheb.zav.; neft' i gas' 1 no.10:107-115 '58.  
(MIRA 12:4)

1. L'vovskiy politekhnicheskiy institut.  
(Pipe)

FEDOROV, A. A.: Master Tech Sci (diss) -- "The effect of perforation on the resistance of pipes to external pressure". L'vov, 1959. 19 pp (Min Higher Educ Ukr SSR, L'vov Polytech Inst), 150 copies (KL, No 17, 1959, 109)

3(5)

SOV/132-59-8-13/18

AUTHORS: Ochkur, A.P., Sokolov, M.M., and Fedorov, A.A.

TITLE: On the Interpretation of Diagrams of Gamma-Gamma  
Core Sampling

PERIODICAL: Razvedka i okhrana nedr, 1959, Nr 8, pp 52-53 (USSR)

ABSTRACT: In the diagram obtained from gamma-gamma core sampling, anomalies caused by caverns in the bore-hole are similar to those caused by rocks and minerals of low density. A correct interpretation of such a diagram can be made, according to the authors, by comparing the diagrams obtained with sounds of a different length. If the thus obtained values of density coincide on a graduated graph of a gamma-gamma survey, the anomaly is caused by the change in density of a rock or mineral. The variation

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SOV/132-59-8-13/18

- On the Interpretation of Diagrams of Gamma-Gamma Core Sampling  
of the compared curves indicates that the bore-hole  
crosses a cavity. There are 2 graphs and 1 table.

ASSOCIATION: VITR

Card 2/2

MIKOV, Dmitriy Stepanovich; FEDOROV, Aleksandr Anatol'yevich,  
ANDRFYEV, Vsevolod Aleksandrovich; UDODOVA, Ol'ga  
Vladimirovna; IVANCHURA, Lev Ivanovich

[Geophysical methods of prospecting] Razvedochnaia geo-  
fizika. [By] D.S.Mikov i dr. Tomsk, Izd-vo Tomskogo univ.,  
1961. 340 p. (MIRA 18:5)

FEDOROV, A.A.; LINKOVA, F.V.

Determination of aluminum oxide in metallic aluminum by hydro-chlorination. Zhur.anal.khim. 17 no.1:53-55 Ja-F '62.  
(MIRA 15:2)

1. I.P.Bardin Central Scientific-Research Institute of Ferrous Metal Industry, Moscow.  
(Aluminum oxide)

SOKOLOV, M.M.; KLEVTSOV, P.P.; FEDOROV, A.A.; KHITEYEV, P.P.

Separate determination of uranium, thorium, and potassium in natural occurrence using a scintillation gamma-spectrometer. Vop.rud.geofiz. (MIRA 18:1)  
no.4:48-57 '64.

L 47085-66 EWT(m)/EWP(t)/ETI IJP(c) JD/JG  
ACC NR: AT6030278 SOURCE CODE: UR/2776/66/000/049/0084/0085

AUTHOR: Sorokina, N. N.; Fedorov, A. A.; Golubeva, V. M.; Chernyakhovskaya, F. V.

ORG: none

TITLE: Chemical-spectroscopic method of determining the samarium content in 1Kh13N16B and 12Kh1MF steels, and KhN77YuR alloy

SOURCE: Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii. Sbornik trudov, no. 49, 1966. Novyye metody ispytaniy metallov; khimicheskiy kontrol' v metallurgii (New methods in the analysis of metals; chemical control in metallurgy), 84-85

TOPIC TAGS: samarium, spectroscopy, metal chemical analysis

ABSTRACT: A chemical-spectroscopic method of determining the samarium content in 1Kh13N16B, and 12Kh1MF steels, and KhN77TYuR alloy has been developed. Samarium is isolated by precipitation in the form of fluoride, which is subjected to spectroscopic analysis. With this method, samarium contents of 0.001—0.1% can be determined with respective errors of ±0.0003—0.008%. Orig. art. has: 1 table. [TD]

SUB CODE: 11, 13/ SUBM DATE: none/ ORIG REF: 001/

Card 1/1 *mt*

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CIA-RDP86-00513R000412610018-8

BRYLEV, G.B.; VASIL'CHENKO, I.V.; VITSEVA, V.I.; PEL'KIN, L.A.

Combined radar and aerological observations in the lower 1.5-km.  
atmospheric layer. Trudy GGO no.173:76-90 '65.

(MIRA 18:3)

APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R000412610018-8"

TURKOV, G.A.; FEDOROV, A.A.

Development of the machinery industry in the Far East. BuiL.tekh.ekon.inform.Gos.nauch.-issl.inst.nauch.i tekh.inform. 18 no.18-10 Ja '65. (MIRA 18:4)

ALEKSEYeva, G.Ye., kand. tekhn. nauk, dots.; MELESHKINA, L.P., dots., kand. tekhn. nauk; BALUYEV, V.K., inzh.; BAMDAS, A.M., prof., doktor tekhn. nauk; VENIKOV, V.A., prof., doktor tekhn. nauk; YEZHKOv, V.V., kand. tekhn. nauk; ANISIMOVA, N.D., dots., kand. tekhn. nauk; GANTMAN, S.A., kand. khim. nauk; GLAZUNOV, A.A., dots., kand. tekhn. nauk; COGUA, L.K., inzh.; GREBENNICHENKO, V.T., inzh.; GRUDINSKIY, P.G., prof.; GORFINKEL', Ya.M., inzh.; ZVEZDIN, A.L., inzh.; KAZANOVICH, G.Ya., inzh.; KNYAZEVSKIY, B.A., dots., kand. tekhn. nauk; KOSAREV, G.V., dots.; kand. tekhn. nauk; MESSERMAN, S.M., kand. tekhn. nauk, dots.; KOKHAN, N.D., inzh.; KUVAYEVA, A.P., dots., kand. tekhn. nauk; SOKOLOV, M.M., dots., kand. tekhn. nauk; LASHKOV, F.P., dots., kand. tekhn. nauk; LAZIN, A.I., inzh.; YUDIN, F.I., inzh.; LIVSHITS, A.L., kand. tekhn. nauk; METEL'TSIN, P.G., inzh.; NEKRASOVA, N.M., dots., kand. tekhn. nauk; OL'SHANSKIY, N.A., dots., kand. tekhn. nauk; POLEVAYA, I.V., dots., kand. tekhn. nauk; POLEVOY, V.A., dots., kand. tekhn. nauk [deceased]; RAZEVIG, D.V., prof., doktor tekhn. nauk; RAKOVICH, I.I., inzh.; SOLDATKINA, L.A., dots., kand. tekhn. nauk; TREMBACH, V.V., dots., kand. tekhn. nauk; FEDOROV, A.A., prof., kand. tekhn. nauk; FINGER, L.M., inzh.; CHILIKIN, M.G., prof., doktor tekhn. nauk, glav. red.; ANTIK, I.V., inzh., red.; GOLOVAN, A.T., prof., red.; PETROV, G.N., prof., red.; FEDOSEYEV, A.M., prof., red.

(Continued on next card)

ALEKSEYEVA, G.Ye.--- (continued). Card 2.

[Electrical engineering manual] Elektrotekhnicheskii spravochnik. Pod obshchei red. A.T. Golovana i dr. Moskva, Energiia. Vol.2. 1964. 758 p. (MIRA 17:12)

1. Moscow. Energeticheskiy institut. 2. Moskovskiy energeticheskiy institut (for Golovan, Grudinskiy, Petrov, Fedoseyev, Chilikin, Venikov). 3. Chlen-korrespondent AN SSR (for Petrov).

FEDOROV, A.A.

Give more attention to buckwheat. Zemledelie 23 no.12:26-27 D  
'61. (MIRA 15:1)

1. Glavnny agronom po semenovodstvu zernovykh kul'tur Mogilevskogo  
oblastnogo upravleniya sel'skogo khozyaystva.  
(Buckwheat)

ACC NR: AP7001420

(A)

SOURCE CODE: UR/0413/66/000/021/0134/0134

INVENTOR: Fedorov, A. F.

ORG: none

TITLE: A method for determining the radial explosive actions of the exploding charge of an electric detonator. Class 42, No. 188076

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 21, 1966, 134

TOPIC TAGS: detonation, electric detonator, explosive, explosive charge

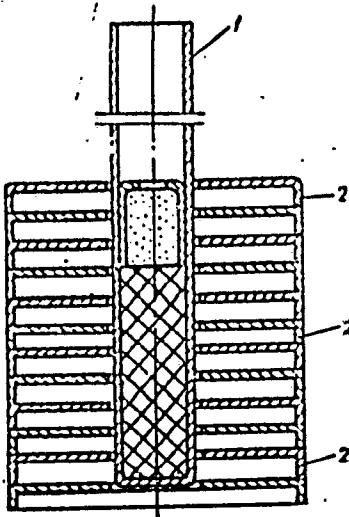
ABSTRACT: This Author Certificate presents a method for determining the radial explosive actions of the exploding charge of an electric detonator. Steel washers (plates) 1 mm thick and about 30 mm in the internal diameter (equal to the outside diameter of the electric detonator shell) are placed on the electric detonator along the entire length of the charge (see Fig. 1). A space of 1.6 mm is left between successive washers. The electric detonator is then exploded, and the power of each detonated zone is determined from the increase in the internal diameters of washers.

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UDC: 531.78.662.423

ACC NR: AF7001420

Fig. 1. 1 - shell; 2 - washer plates



Orig. art. has: 1 figure.

SUB CODE: 19, 13/ SUBM DATE: 05Sep63

Card 2/2

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CIA-RDP86-00513R000412610018-8

Editors: FEDOROV, A.I. A.; GAMMERMAN, A. F.; GUSYNIN, I. A.; IL'IN, M. M.; NEKRASOVA  
V. L.; NIKITIN, A. A.; Responsible editor: SHISHKIN, B. K.

Poisonous Plants of Meadows and Pastures, Botanical Institute imeni V. L.  
Komarov. Moscow-Leningrad; 1950, 527 pp.

Book W-22202, 7 Apr 52

APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R000412610018-8"

FEDOROV, Al. A.

Botany-Curiosa and Miscellany, Plants, Flowering of

Cauliflory in *Erica arborea* L. Al. A. Fedorov. Bot. zhur. 37 No. 3 1952.  
Botanicheskiy Institut im. V.L. Komarova, Akademii Nauk SSSR Recd. March 15, 1952

SO: Monthly List of Russian Accessions, Library of Congress, September 1951, Uncl. <sup>2</sup>

1. FEDOROV, AL.A.
2. USSR (600)
4. Roots (Botany)
7. Natural "spot"seeding and self-grafting of roots in dandelions (*Taraxacum*).  
Bot.zhur. 37 no. 6. 1952
9. Monthly List of Russian Accessions, Library of Congress, March,1953.Unclassified.

SHARAPOV, N.I.; FEDOROV, Al.A., doktor biologicheskikh nauk, professor,  
otvetstvennyy redaktor; LUKASHEVICH, L.A., redaktor; AROKS, R.A.,  
tekhnicheskiy redaktor.

[Plant chemistry and climate] Khimizm rastenii i klimat. Moskva,  
Izd-vo Akademii nauk SSSR, 1954. 207 p. (MLRA 7:11)  
(Botanical chemistry) (Crops and climate)

FEDOROV, Al.A.; FEDOROV, An.A.; RZAXADE, R.Ya.

New and important Caucasian species of the genus *Astragalus* L.  
Bot. mat. Gerb. no. 16:221-232 '54. (MLRA 8:9)  
(*Astragalus*)

FEDOROV, Al.A.

New species of spurge (Euphorbia L.) from Kopet Dagh. Bot.mat.  
Gerb. 16:241-244 '54. (MIRA 8:9)  
(Spurge)

FEDOROV, Al. A.

Relation and interdependence of some anomalous structures in  
plants (for example: Campanula medium L.) Bot. zhur. 39 no.4:  
568-576 Jl-Ag '54. (MLRA 7:10)

1. Botanicheskiy institut im. V.L.Komarova Akademii nauk SSSR,  
Leningrad.  
(Botany--Anatomy)

FEDOROV, A.A., KIRPICHNIKOV, M.E.; ARTYUSHENKO, Z.T.; BARANOV, P.A.,  
redaktor; SHCHERBINA, T.S., redaktor izdatel'stva; KIRNARSKAYA, A.A.,  
tekhnicheskiy redaktor

[Atlas of descriptive morphology of the higher plants; leaves]  
Atlas po opisatel'noi morfologii vysshikh rastenii; list. Pod  
obshchel red. P.A. Baranova. Moskva, Izd-vo Akademii nauk SSSR,  
1956. 301 p. ---[Models for the determination of principal laminar  
forms] Shablony dlia opredeleniya osnovnykh form plastinki lista.  
6 l. (in pocket) (MLRA 9:9)

1. Chlen-korrespondent Akademii nauk SSSR (for Baranov)  
(Leaves--Morphology)

FIODOROV, Al. A. (Leningrad)

Tasks and outlood for the development of botany in the sixth  
five-year plan. Bot. zhur. 41 no.3:313-317 Mr '56. (MLRA 9:8)  
(Botany)

FEDOROV, Al.A.

Some anomalies in tulips and their importance in studying the  
morphological structure of Tulipa. Bot. zhur. 41 no.5:681-689  
My '56. (MLRA 10:?)

1. Botanicheskiy institut im. V.L. Komarova Akademii nauk SSSR,  
Leningrad.  
(Tulips) (Abnormalities (Plants))

FEDOROV, Al.A.

Interesting case of anomaly in the fruit structure of a sweet and  
trefoilolate orange hybrid. Bot. zhur. 41 no.10:1474-1478 0 '56.

(MIRA 10:1)

1. Botanicheskiy institut imeni V.L. Komarova Akademii nauk SSSR.  
Leningrad.

(Orange) (Fruit--Morphology)